

White Paper Topic

# Agile Modular Secure Facility (SCIF) Fabrication

*Innovative or Unique Contract Acquisition or Construction Methods*



Example of a Pre-Fabricated Modular Panelized Sensitive Compartmented Information Facility (SCIF) Constructed Inside an Existing Hangar Facility



- \* Manufacturing Acoustic Mitigation Products Since 1949
- \* Designing Modular SCIF/SAPF Structures Since 1980

Gerry Clancy  
603.496.1284  
clancy@magnumanalytics.com

Tom Heins  
507.261.9290  
theins@soundseal.com

# BLUF

- **Air Force is Adapting to Meet Great Power Competition**
  - ✓ Mission Demands Creating Urgent Need for Additional SCI and SAP Access
- **Flexible Modular Approach to Building Secure Facilities**
  - ✓ Modular Panel Architecture – Can be Assembled/ Moved /Re-Assembled
  - ✓ Expandable and Reconfigurable to Meet Evolving User Needs
  - ✓ Flat Panels Easily Transported (OCONUS Ops)
- **Pre-Fabricated in Factory Controlled Environment**
  - ✓ Factory Tested not subject to Traditional Onsite Construction Variables
  - ✓ Acoustic Material and RF Shielding Applied in Proven Repeatable Processes
  - ✓ Guaranteed 1<sup>st</sup> Time ICD 705 Accreditation
- **Acquisition Strategy Options**
  - ✓ Dismountable and Subject to O&M Equipment (3400) Funding
  - ✓ GSA Schedule 70 Blanket Purchase Agreement; FEDSIM OASIS IDIQ
  - ✓ Leasing
- **Standardized Modular SCIF Layout and Design vs Unique Design Build**
  - ✓ Commonality Replicated Across Several Basing Locations

## Example Modular SCIF Concept

AF Installation of the Future  
**Common Relocatable SCIF**

### *OTA Rapid Prototype*

- Standard F-35 Maintenance SAPF
- Agile Combat Employment
- Deployable to OCONUS
- Common Layout and Comms
- Reduced Training
- Volume Purchase Savings
- 804 Authority for Rapid Fielding

# What is a SCIF/SAPF?

- Facility to Store and Process Sensitive Compartmented Information (SCI) and Special Access Program (SAP) Information. SCI/SAP can be at any Security Level
- All SCI must be handled within formal access control systems established by the DNI. DNI has published Intelligence Community Directive (ICD) 705 directing the construction guidelines for SCIFs
- Acoustic, RF and TEMPEST mitigation must be installed and tested in accordance with ICD 705 to prevent foreign surveillance. SCIFs must pass a formal accreditation process prior to occupancy

## Air Force SCI/SAP Mission Demand

- 5<sup>th</sup> Generation Aircraft Operations and Maintenance
- AF Cyber Operations
- Air Force AOC Weapon Systems
- Intelligence Support for Multi-Domain Operations (SPACE Command)

## Tyndall SCIF Needs

- 53<sup>rd</sup> WEG – Combat Archer 5<sup>th</sup> Gen Aircraft Participants
- F-35 Beddown Ops and Maintenance SCIF/SAPF
- 601<sup>st</sup>/AFNORTH Air Operations Center
- MQ-9 Reaper Intelligence Support



Panelized SCIF to Support POTUS OCONUS Travel

# True Cost of Secure Facility Construction

Traditional Design-Build SCIF Construction Defined by Lowest Bid (Labor and Materials)

.....End User Costs can be Much Higher Defined by Time to Accreditation  
(Idle Cleared Personnel, Operational Readiness and Mission Success)

## Modular SCIF Panel Build

- Relocatable Structure
  - *O&M Funding Rapid Fielding*
- Factory Built and Inspected
  - *Guaranteed Accreditation*
  - *Rapid Assembly of Pre-Fab Components*
  - *Proven Standard Designs*

- Expandable Structure
- Temporary SCIF

- **Fastest time to Accreditation**

➤ **GOAL:** Fully Accredited Modular SCIF/SAPF  
Delivered and Assembled in 8 Weeks After Award

## Traditional SCIF Design Build

- Permanent Structure
  - *MILCON Funded Protracted Acquisition*
- On-Site Construction
  - *Installation Flaws Can Delay Accreditation*
  - *Fabrication on site; Dependent Upon Skilled Installers and External Variables (Weather)*
  - *New Design Build*

- Demolition and Expensive Renovation

- No

- **?**



# Why Panelized?

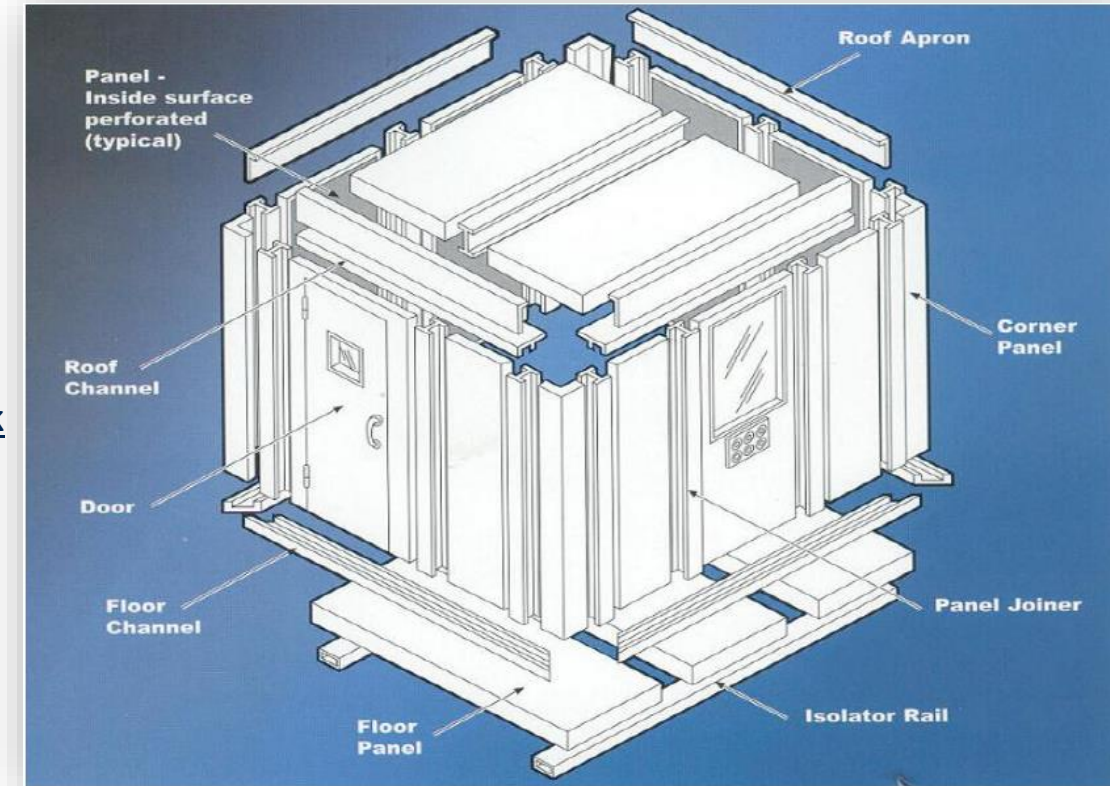
## All the Advantages of Other Modular Fabrication (e.g. Containers) and.....

- Can be Assembled in Multiple Locations
  - Freestanding
  - Inside Limited Access Space (Hangars)
  - Secure Space Inside Existing Facility (Remodel)
- Unassembled Panels Stack Flat – Easily Transported
  - Austere Locations
  - International Customs and Logistics
- Interchangeable Panels Can be Reconfigured
  - Rooms Can be Rearranged for Security Levels
  - Facility Can be Dismounted and Reassembled
- Design Elements for Customized Interior



# Pre-Fabricated Acoustic/RF modular building components

- **Highly Automated Agile Manufacturing Process Focus**
  - ✓ Factory Quality Controlled Environment
  - ✓ Inventory Management for Streamlined Deliveries
  - ✓ Fast Changeovers for Customized Panels
  - ✓ **Standard Panels and Doors exceed ICD 705 STC Specifications**
- **Interlocking Steel Welded Structural Panels and Joiners**
  - ✓  $\frac{1}{4}$  Inch Steel Bullet/Blast/Wind Resistant Panels – 4 Inches Thick
  - ✓ Panel System Structural Integrity Supports Multi-Story Installs
  - ✓ Easily Transported and Assembled – Remodels or Standalone
- **Executive Appointments**
  - ✓ Custom Details for Executive SCIFs
  - ✓ Acoustic Windows, Fabric Paneling, Chair Rails, Wood Veneer and Laminate Flooring



# Agile Manufacturing of Engineered Pre-Fabricated Designs



**Manufacturing Door line - hung and adjusted before shipment**

## The Agile Process

- Automated Manufacturing with Statistical Process Control
- Acoustic and RF Design Margins Exceeding ICD 705 Specifications
- Small Batch Process Flow and Changeovers for Customized Orders
- Inventory Management and Expedited Materials Handling
- Trained and Highly Skilled Workforce
- Library of SCIF Compliant Modular Door and Panel Designs



# Agile Manufacturing Process Capabilities

## Highly Automated Factories

- ✓ Controlled Environment
- ✓ Quality Control – Inspection and Test
- ✓ Fast Changeovers – Custom Designs
- ✓ Scalable Workforce to Meet Demand

## Automated Process Control

- In-House Powder Coating Line
- Multiple Head Spot Welders
- Amada Punch Presses
- Press Brakes
- Shears





# Summary

- **Standard Pre-Fab Modular SCIF Designs**
  - SCIF Design and Layout Replicated for Commonality Across Multiple Locations
  - Volume Cost Savings
- **Turn-Key SCIF/SAPF Systems**
  - Strategic Industry Partnerships with Integrators and Facility Management Companies
  - Cleared Installers, Logistics, Comms/IT, HVAC
- **First-Time Accreditation**
  - Standard Product Design Margins Exceed ICD 705 Requirements
  - Rapid Build and Operational Deployment with Subsequent Move Recertification
- **Adaptive Basing – Agile Combat Employment**
  - Large Fixed Installations/Facilities are Vulnerable Fighting Near Peer Adversaries
  - Modular Panelized SCIF/SAPF Allows for Rapid Mobility (Install/Teardown)
  - Eliminates the Need for T-SCIF
- **Flexible Acquisition – Rapid Fielding**
  - Modular SCIFs/SAPFs Can be Dismounted and Qualify for O&M Procurement
  - Rapid Prototyping with OTAs
  - GSA Blanket Purchase Agreements



Panel Built SCIFs can be Transported as Complete Units